IN THE CLAIMS:

Please amend the claims as follows.

Claims 1-16 (canceled)

17. (currently amended) A method of producing a silicon ingot, comprising:

producing a silicon single crystal ingot having ~~growth defects~~60% or more GOI C mode yield and being prevented from generation of dislocation clusters under the following conditions:

(1) $1.15 \leq (G1_{edge}/G1_{center}) \leq 1.25$;

(2) $0.5 < (\text{OSF ring inner diameter/crystal diameter}) < 1.06 \times (G1_{edge}/G1_{center})^{-0.2} (G1_{center} \times G2_{center})^{-0.2}$

where

$G1_{center}$ is a temperature gradient in the axial direction at the crystal center in the temperature region from the solid-liquid interface temperature to approximately 1350°C ~~and,~~ $G1_{edge}$ is a temperature gradient in the axial direction at the crystal edge in the temperature region from the solid-liquid interface temperature to approximately 1350°C; ~~and,~~ $G2_{center}$ is a temperature gradient in the axial direction at the crystal center near 1120°C

~~cutting the wafer from portions, of the produced ingot, in which the inner diameter of the OSF ring is at least 1/2 the crystal diameter~~.

18. (currently amended) A method of producing a silicon ingot, comprising the steps of:

controlling the $G1_{edge}$ ~~and,~~ the $G1_{center}$ and the $G2_{center}$ of the ingot so that:

(1) $1.15 \leq (G1_{edge}/G1_{center}) \leq 1.25$;

(2) $0.5<(\text{OSF ring inner diameter/crystal diameter})<1.06\times(G1_{edge}/G1_{center})^{-0.2}(G1_{center}\times G2_{center})^{-0.2}$

where

$G1_{center}$ is a temperature gradient in the axial direction at the crystal center in the temperature region from the solid-liquid interface temperature to approximately 1350°C ~~and~~, $G1_{edge}$ is a temperature gradient in the axial direction at the crystal edge in the temperature region from the solid-liquid interface temperature to approximately 1350°C~~,~~, and $G2_{center}$ is a temperature gradient in the axial direction at the crystal center near 1120°C; and

~~cutting the wafer from portions, of the produced ingot, in which the inner diameter of the OSF ring is at least 1/2 the crystal diameter~~

producing a silicon single crystal ingot having 60% or more of GOI C mode yield and being prevented from generation of dislocation clusters.

19. (New) A method of producing a silicon wafer comprising:

cutting the wafer from portions, of the ingot of claim 18, in which the inner diameter of the OSF ring is at least 1/2 the crystal diameter.

20. (New) A method of producing a silicon wafer comprising:

cutting the wafer from portions, of the ingot of claim 19, in which the inner diameter of the OSF ring is at least 1/2 the crystal diameter.